



Raleigh

Capital Boulevard North Big Ideas

Green Road Community Center

April 1, 2019



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Participation Today

- Sign in to the meeting
- Visit the stations
- Take the survey
- Provide comments



Contents

- Background
- Initial strategies
- The Boulevard strategy
- Intersection Design
- Street Section Concepts



Corridor Study

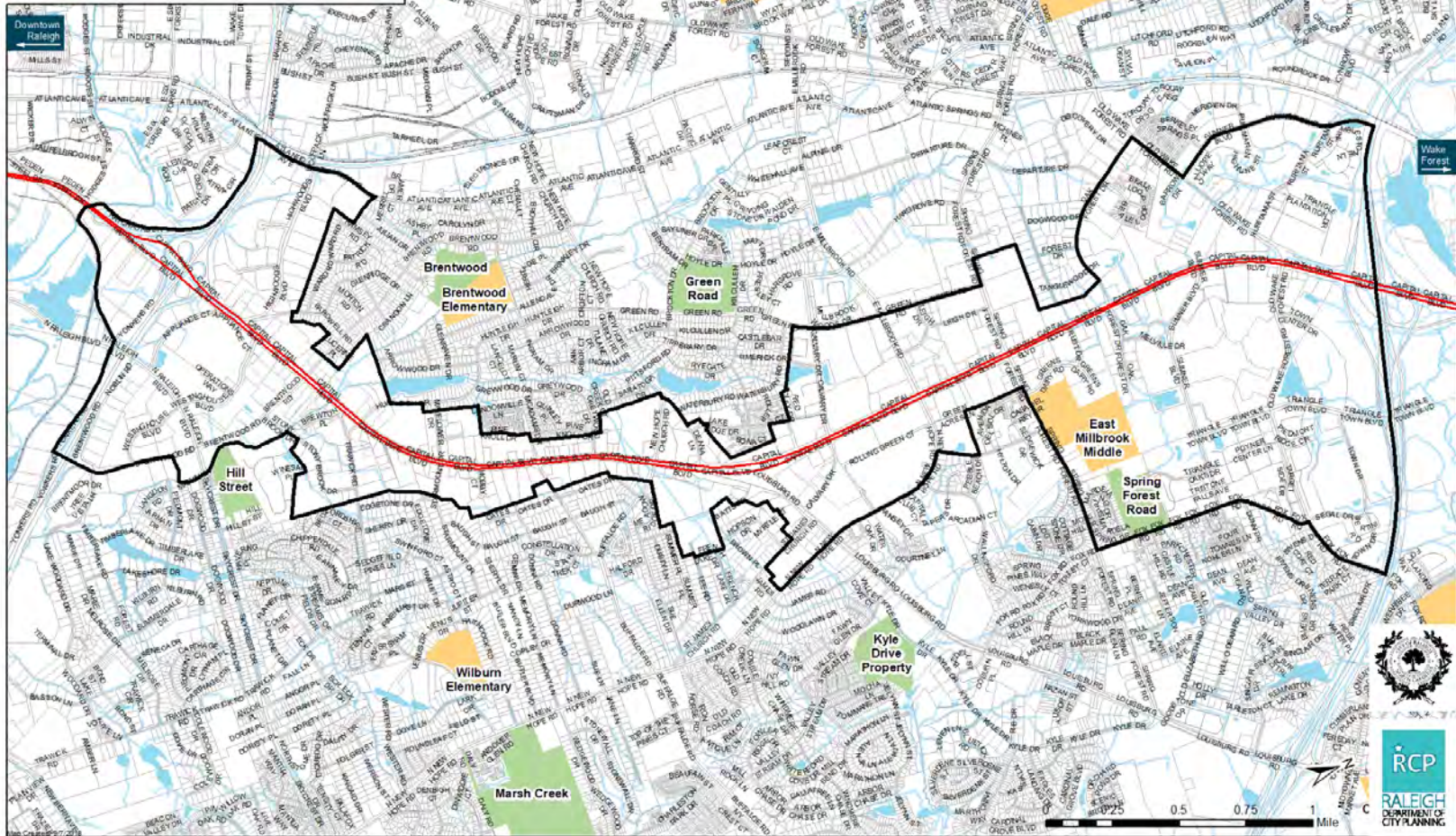
The Capital Boulevard North Corridor Study is a public process led by the City of Raleigh with the goal of creating a long range plan for North Capital Boulevard from I-440 to I-540.



Project Purpose

- Identify a **multi-modal transportation** vision that considers pedestrians, bicycles, transit, and automobiles
- Identify new opportunities for **mixed-use development**
- Improve **urban design** along the corridor
- Create a community development vision that includes:
 - Neighborhood stability
 - Social engagement
 - A blend of incomes and household types

CN CAPITAL BOULEVARD NORTH CORRIDOR STUDY





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Study Timeline

Summer 2018: Visioning

Fall 2018: Kickoff workshop

Spring 2019: Big Ideas Workshop

Fall 2019: Specific Ideas Workshop

Winter 2019/2020: Recommended Improvements

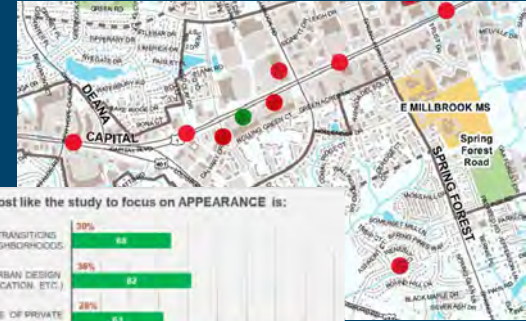
Spring 2020: Final Recommendations and Draft Plan



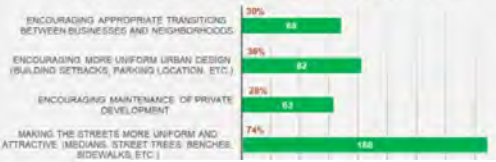
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Previous Activities

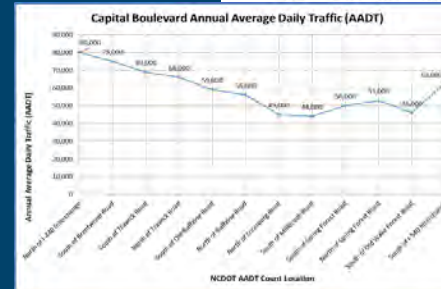
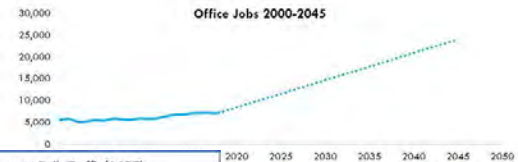
- Visioning Meeting and Survey
- Kickoff Survey
- Market Analysis
- Community Profile
- Travel Data



The way I would most like the study to focus on APPEARANCE is:



Office Jobs 2000-2045



CENTRAL
+5,200
(10% Annual Growth)

NORTH
+5,750
(6% Annual Growth)



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Visioning Meeting & Survey



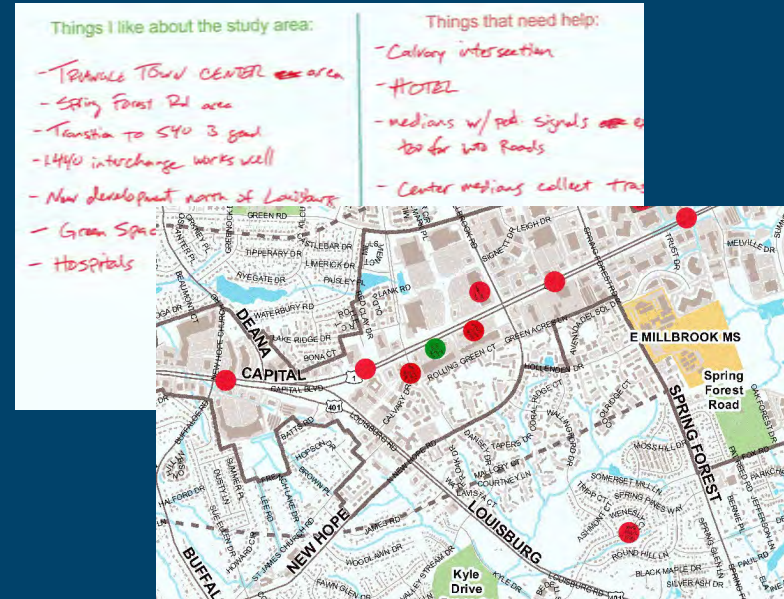


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Visioning Meeting & Survey

General Experience of Corridor

- Useful regional connection
- Variety of retail
- Neighborhoods and parks
- Congested
- Not attractive
- Impacts of some commercial uses



Kickoff Meeting & Survey



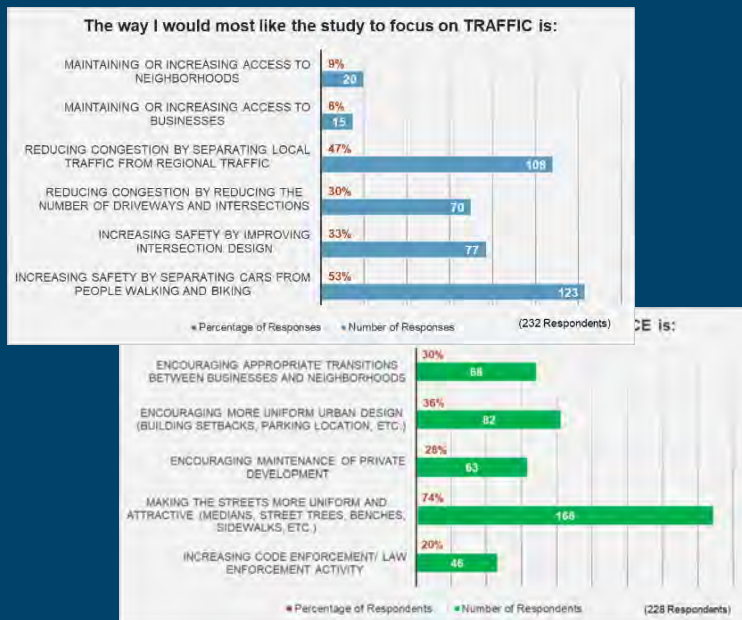


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Kickoff Meeting & Survey

Specific Priorities

- Reduce vehicle/pedestrian conflicts
- Separate local/regional traffic
- Uniform street appearance
- Rapid transit
- Easier to cross
- Balanced land uses/mixed use development

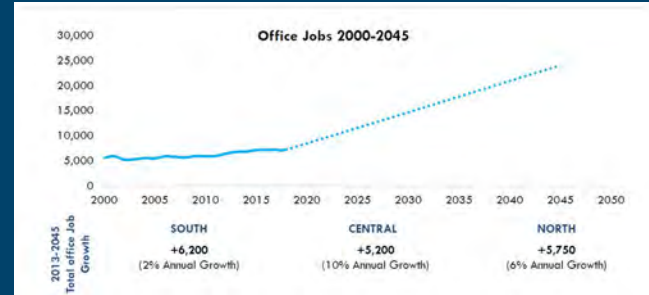




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Market Analysis

- Housing costs are low
- Office space has low vacancy
- 20% of Raleigh's retail space
- Most new development around Triangle Town Center
- Demand for housing, office, and grocery projected to grow

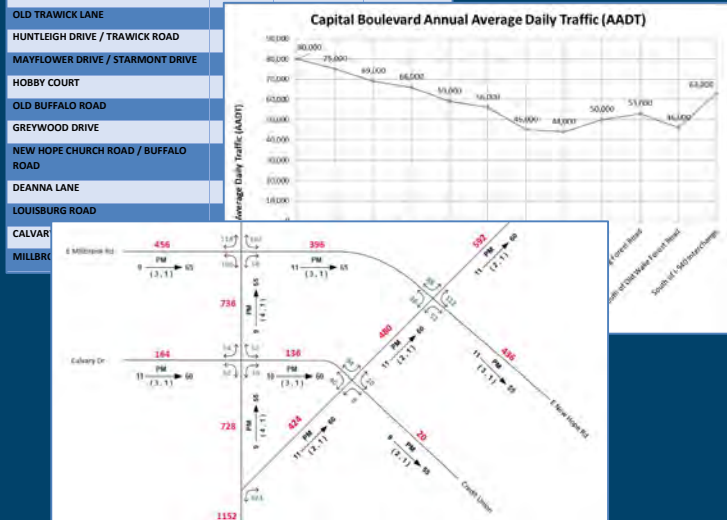


Total Retail Potential			
Convenience Retail			Comparison Retail
Convenience Goods	Grocery	Food & Beverage	Comparison Goods
<ul style="list-style-type: none">• Health and Personal Care Stores• Miscellaneous Retailers• General Merchandise	<ul style="list-style-type: none">• Grocery Stores	<ul style="list-style-type: none">• Restaurants• Bars and Drinking Establishments	<ul style="list-style-type: none">• Furniture• Electronics and Appliance• Clothing• Sporting and Hobby Goods• Books and Music



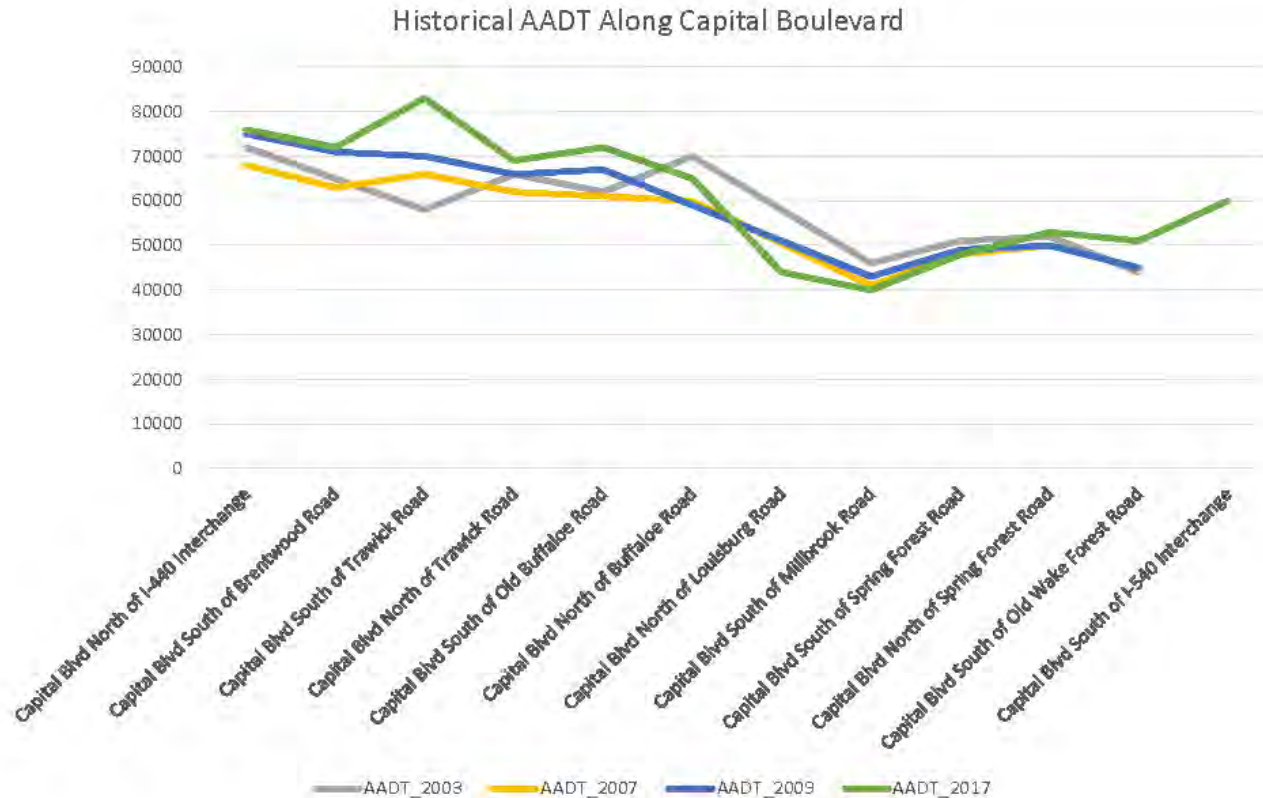
Travel Data

Intersection with Capital	Number of Crashes	Percent of Crashes	Severity Index
I-440 INTERCHANGE	516	14%	2.3
APPLIANCE COURT	15	0%	2.0
HIGHWOOD BLVD	187	5%	3.5
WESTINGHOUSE BLVD	153	4%	3.0
BRENTWOOD ROAD	232	7%	3.7



- Existing traffic volume
- Traffic volume projections
- Crash data: vehicle, bicycle, pedestrian
- Bicycle and pedestrian stress
- Transit ridership
- Other plans and projects

Vehicle Traffic Counts

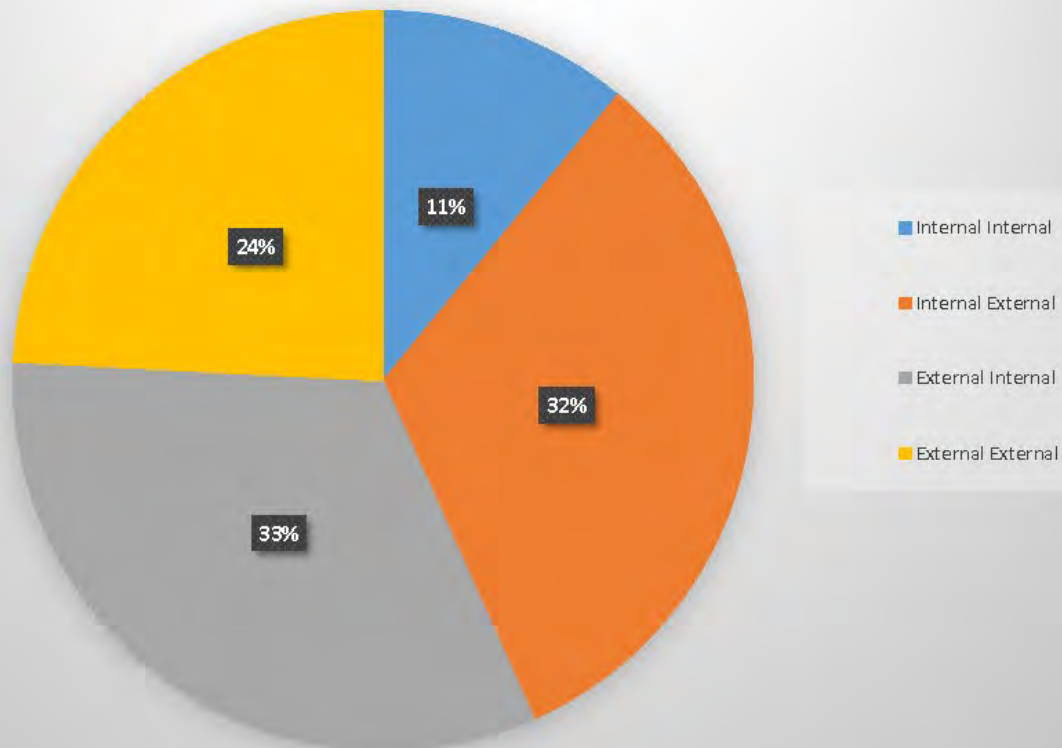




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Vehicular Traffic Locations

All Day - 2017



Pedestrian Access to Transit Stops



Pedestrian-Transit Access

- Poor
- Moderate
- Good
- Existing Sidewalk

- Study Area
- Area of Influence
- Capital Boulevard North Corridor



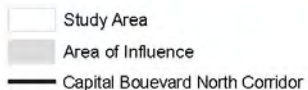
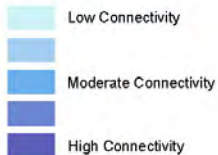


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Bicycle Connectivity



Pedestrian-Transit Access





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Data Input Summary

Community Values

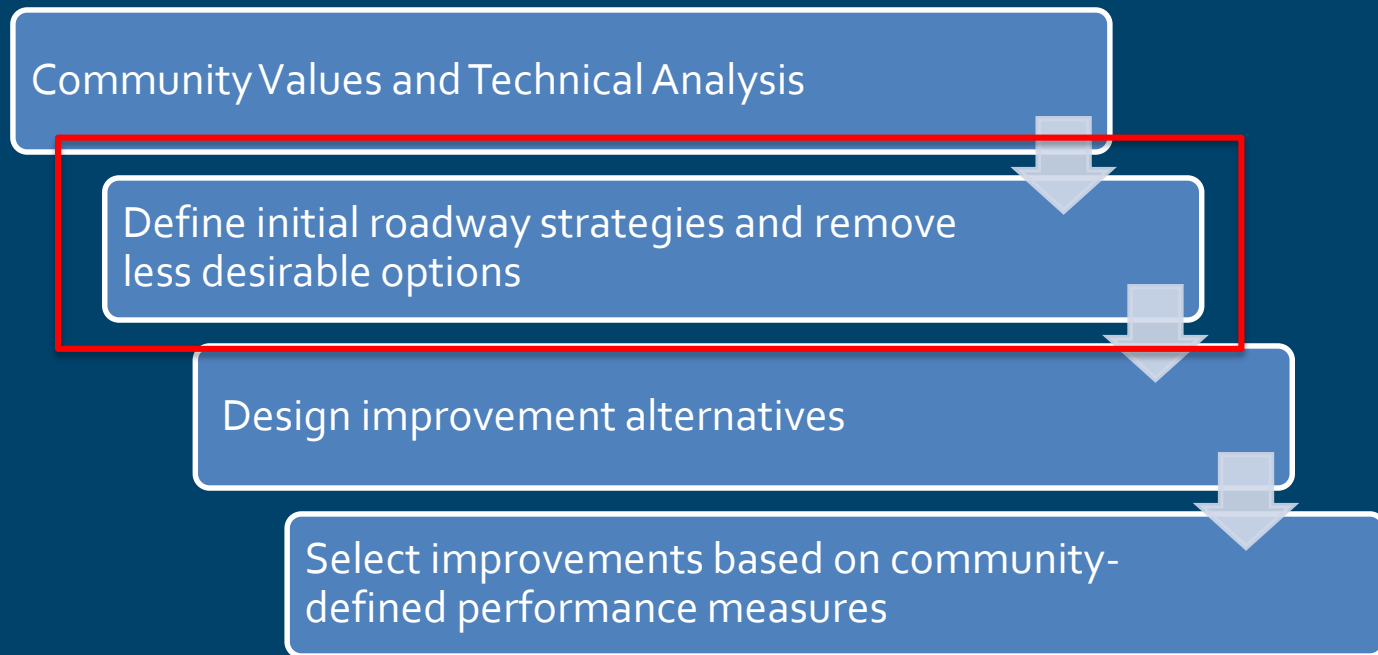
- *Reduce congestion*
- *Improve safety*
- *Maintain local access*

Technical Analysis

- *25-50% growth in traffic volume projected by 2045*
- *Little room for additional right-of-way*
- *Proven demand for transit*



Strategy Framework





Initial Strategies

Main Street



Boulevard



Freeway





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Initial Strategies

- Main Street: Helps pedestrian safety and local access, may make congestion worse
- Boulevard: Helps congestion, maintains much of local access, improvements can be designed to improve safety
- Freeway: Helps congestion the most, removes much of local access, improvements can be designed to improve safety



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Initial Strategies

- Main Street: Helps pedestrian safety and local access, may make congestion worse
- Boulevard: Helps congestion, maintains much of local access, improvements can be designed to improve safety
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The Boulevard Strategy

- Reduce left turns from smaller cross streets
- Grade Separations (Interchange or Intersection)
- Improve street cross-section for pedestrian safety, appearance, and transit
- Signal timing improvements



Intersection Design Options



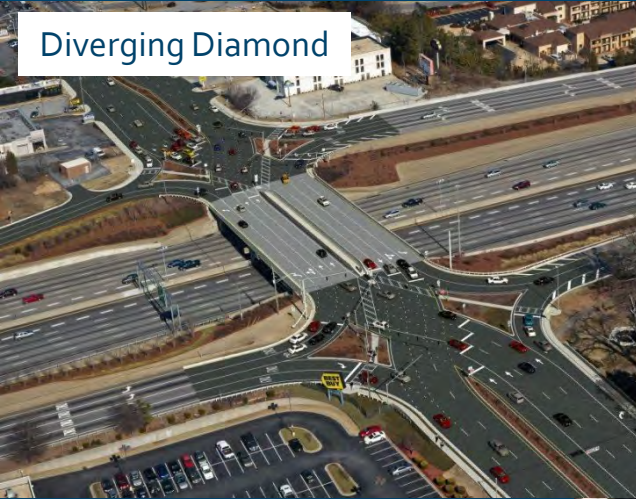
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Intersection Safety

- Interchanges can help to reduce crashes by **eliminating conflicts** between vehicles and between vehicles and pedestrians
- Interchanges can allow bicycles and pedestrians to cross Capital Boulevard with fewer conflicts with vehicles and **smaller individual crossing distances**
- Interchanges can facilitate pedestrian **access to transit stops**

Grade Separated Interchanges

Diverging Diamond



Partial Cloverleaf



Tight Diamond



Other Types of Grade Separation





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Alternative Intersections



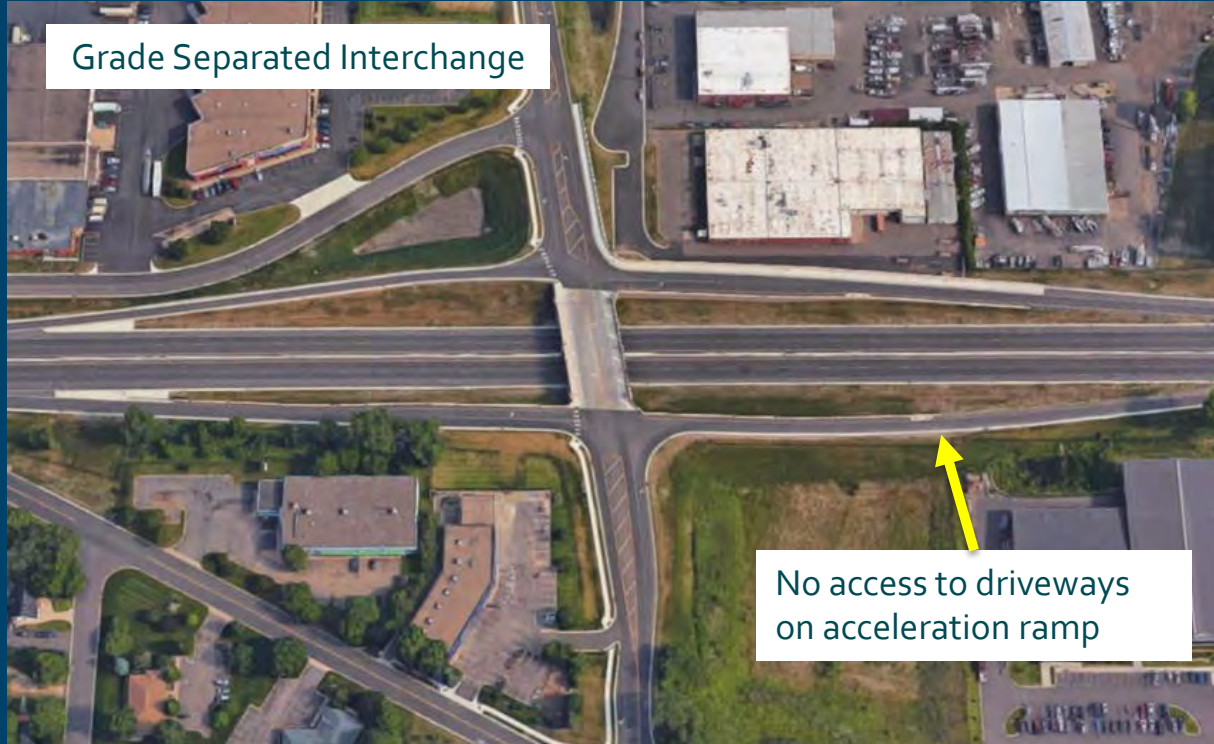


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Access

Interchange Factors

Grade Separated Interchange



No access to driveways
on acceleration ramp



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Access

Interchange Factors

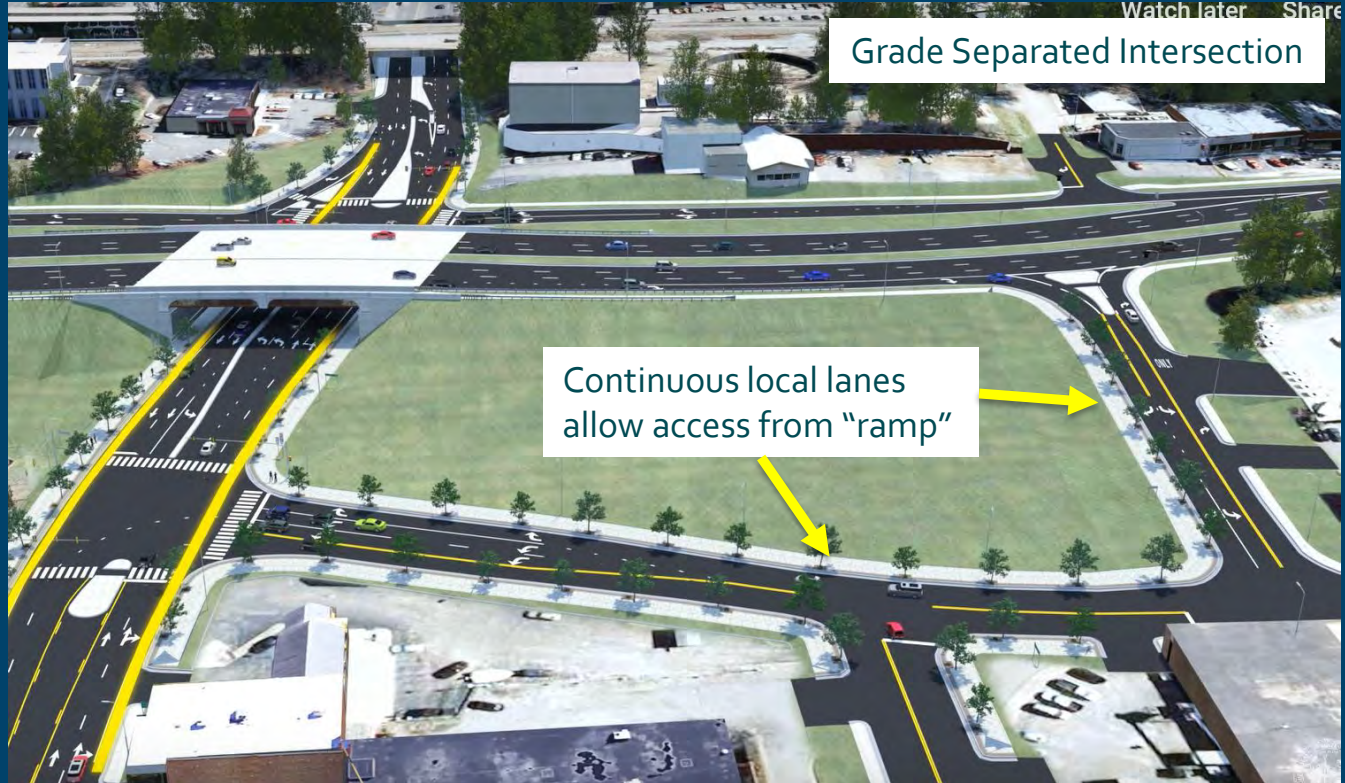




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Access

Interchange Factors





Street Section Concepts



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A Note on the Street Sections

The Wake Transit Plan identifies Capital Boulevard as a Frequent Network Corridor but there are no current plans for enhanced transit service. As such, the Capital Boulevard North study does not assume any specific enhanced transit service characteristics such as potential routing, dedicated lanes, or station locations. Instead, the study presents options that could accommodate enhanced transit service if it is planned in the future.



Concept Section 1

- Uses more right-of-way than existing
- Would not allow for most reliable transit service



Information presented is conceptual in nature and not a proposed design. The transit lanes shown on the cross-section would only be constructed if enhanced transit service is planned in the future.

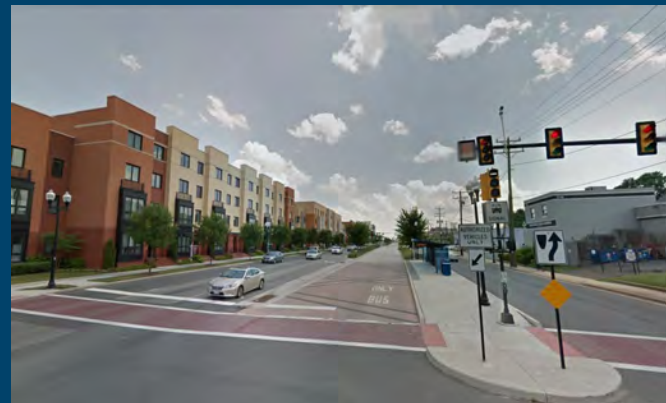


Section Concept 2



Concept Section 2

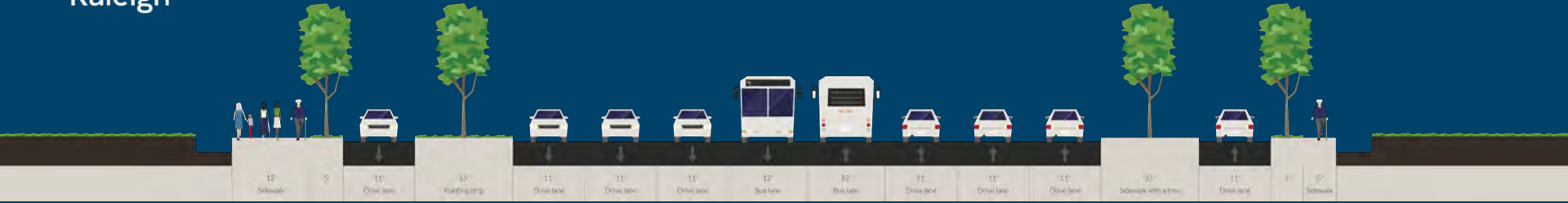
- Uses same right-of-way width as Concept Section 1
- Allows for dedicated bus lanes in the future that can significantly improve transit reliability



Information presented is conceptual in nature and not a proposed design. The transit lanes shown on the cross-section would only be constructed if enhanced transit service is planned in the future.



Section Concept 3



Concept Section 3

- Uses more right-of-way than other two concepts
- Allows reliable transit service
- Provides buffer from through traffic
- Can encourage more urban development pattern



Information presented is conceptual in nature and not a proposed design. The transit lanes shown on the cross-section would only be constructed if enhanced transit service is planned in the future.



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Street Section Factors

- Concept Section 1 uses more right-of-way than existing, **would not allow for most reliable transit** service
- Concept Section 2 uses same right-of-way as Concept Section 1, allows for dedicated bus lanes in the future that can **significantly improve transit reliability**
- Concept Section 3 uses more right-of-way than other two concepts, allows **reliable transit service**, provides **buffer from through traffic**, can encourage **more urban development** pattern



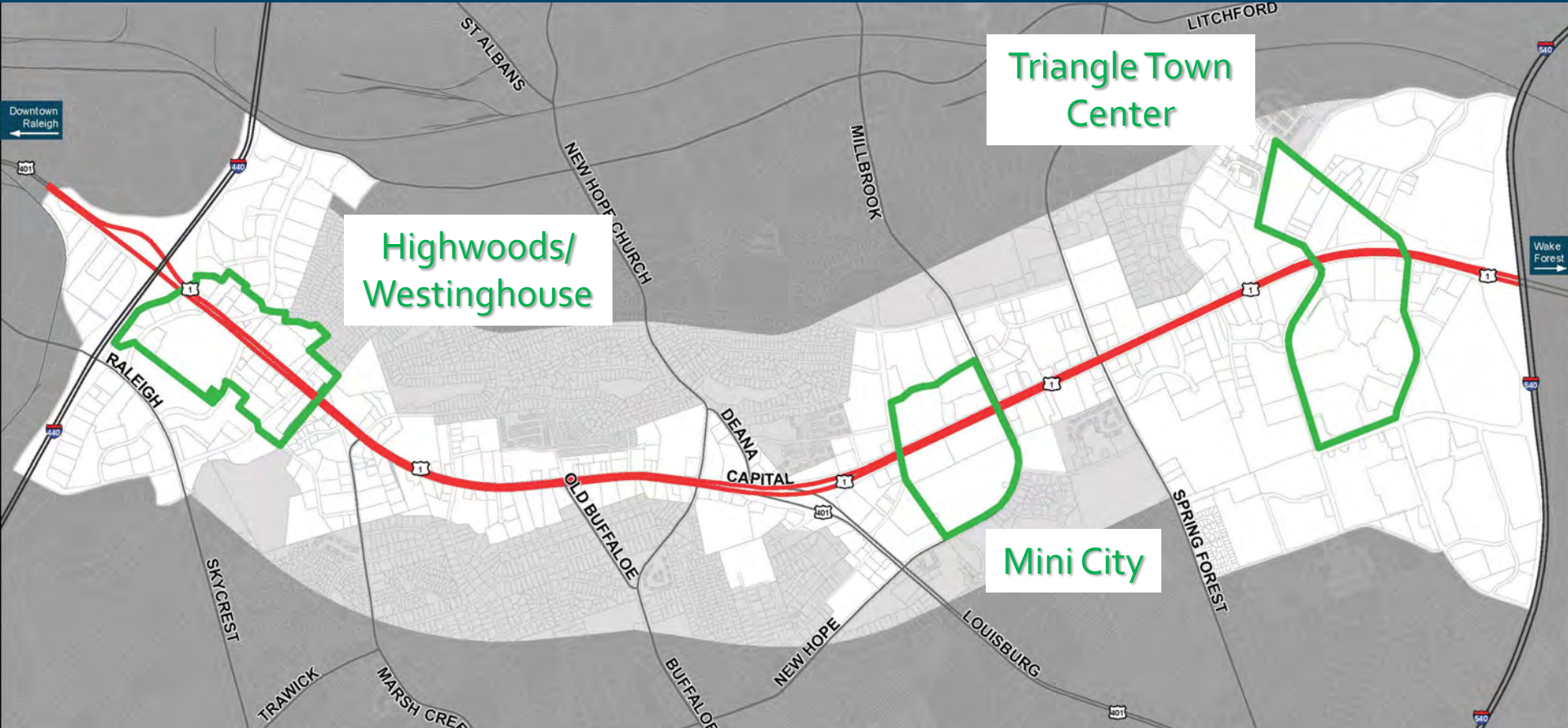
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Land Use Elements

Land use recommendations in this study

- Land Use Vision Areas – detailed land use and urban form concepts to envision possible future development pattern
 - Triangle Town Center
 - Mini City
 - Highwoods/Westinghouse
- General Land Use Policies – How can land use policies and transportation improvements support each other to maximize community benefits

Land Use Vision Areas



Example Land Use Recommendation: New Hope/Millbrook



Note: The land use policy shown is an example for display purposes only and not a final recommendation.



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Land Use Factors

Access, Land use, and Urban Form

- Areas with **greater access** from Capital Boulevard are better **suited to retail**
- Areas **accessed by secondary streets** may be more suited to **office or residential uses**
- **Different section** designs support **different urban form** patterns
- **Transit stops should be coordinated** with nodes of employment, denser housing, or mixed-use development



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Participation Today

- Have a snack!
- Visit the stations
- Take the survey



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Thank you!

Survey

- Open April 1 – May 18
- www.planningforraleigh.com/capitalnorth

Design alternatives this fall

- Intersections
- Street sections
- Land use vision areas